

Hello,

My name is Jade Nguyen. I'm a senior at [REDACTED], where I have organized a letter writing campaign. You will be receiving at least 20 letter forms from me from students at my school.

For now, I am submitting my own commentary.

I have specified per section of the amendment where my questions are addressed which are listed below.

## MY QUESTIONS

- What were the new testing results (as promised by Scott Pruitt and Albert Kelley)?
  - Where else was tested?
  - What's the news on off-site remediation?
- If the waste is peaking in 9000 years, why are we leaving over 70% (30% radioactivity)?
- If we're leaving some waste, will the "cap" have a barrier underneath that prevents waste from soaking into the water table?
- How are you going to warn future generations/civilizations about the waste left here?
  - WIPP Site communication/attempts to show the danger of material here
  - English won't last forever, so it's important we have something to address this
- Are there any reparations for the health bills of citizens affected by our gov's radwaste?
- Why is 52.9 ci/g your requirement for excavation?
  - What data do you have showing that this is the amount that will ensure safety?
- Why 16ft? Why not keep going?
- Effective for 200-1000 years? That's a huge range. We need specifics before we approve it.
- Who is paying for long term surveillance? How long is long-term? (We need to babysit this waste for 9,000 years. No civilization has lasted that long)
- How will you ensure the safety of the workers? And ensure they have total informed consent of the situations they will be working in?
- How do you plan to work around the fire?
- OU3 (groundwater)? Is it not going to be addressed for five years during work on WLL? Even if the USGS confirmed radioactivity above national maximum contaminant levels? (in 43/81 wells)
- Investigating two homes is NOT enough to qualify you have ensured safety in Spanish Village. These people should be a part of remediation if their homes are contaminated by YOUR waste (2.3)
- At the Bridgeton Municipal Athletic Complex (BMAC) a mile away, what does it mean that "no radionuclides were found above levels of concern"? Then what WAS found? What level is of concern to you? (2.3)
- "however, concentrations of radium-226, thorium-230, and uranium-238 from the PRP's on-site monitoring tended to be lower than the levels measured at the EPA's off-site reference station" (2.4) Doesn't it concern you that we're asking for the people paying for the problem to tell us how much of a problem there is? Can we get nonpartisan third party data? I want to feel safe without worrying about how much of the story is a lie
- "stormwater does not pose an unacceptable risk to public health" but it WAS found, even if it didn't meet your standards. So how much was found? (2.6)
- Section 2.7 talks about additional tests, but since we cannot say the entire site has been classified, how are you going to make certain you are in fact removing 70% of the waste (if we still don't know where all of it is)?
- 3.0 states that RIM has been found as far down as 84 feet, so why does remediation stop at 16 ft?

- Site 2 is much more radioactive than we previously realized, but even though it is farther away from the airport and residents, it does sit nearer to the Missouri River, which has the potential to contaminate one of the nation's largest rivers and then the Mississippi. It requires as much (if not slightly more) attention than area 1 (210,000 cubic yards in area 2 compared to 58,000 in 1)
- 3.0 states "Elevated thorium and radium concentrations indicate high toxicity, and radioactive decay of thorium to radium will produce higher levels of gamma radiation and radon gas in the future. In addition to high radioactivity and anticipated ingrowth, laboratory analyses demonstrate that radionuclides have the potential to leach from radioactive contamination under certain conditions, and could migrate to groundwater.", so now that you have admitted it will only become more dangerous, why leave any radwaste at all?
- "A separate remedial investigation will be performed at OU-3 to determine whether potential groundwater contamination may exist as a result of releases which occurred at the Site prior to the implementation of the remedy at OU-1. " section 4.0
  - What about contamination that continues to occur after the remedy? (if you're leaving 30%, it will continue to leach into the groundwater, grow more radioactive, and infiltrate the groundwater even after you clean up OU-1 and even OU-3. You need a more long-term commitment to us. Don't promise to clean up a mess halfway if it will continue getting messier for us later.
  - Is this new remedial investigation also going to take 27 years on the EPA Superfund priorities list to be solved?
- In 5.0, the EPA mentions that the risks are above EPA levels, but never mentions what the calculations were. You owe it to the people who have died due to your lack of action and the countless years that the EPA and Republic have sworn this landfill is safe. What are the numbers? What exactly did you find for the risks today?
- 5.1 states, "The timeframes associated with the effects of ingrowth do not specify when in the future the contamination at the Site will pose unacceptable risks. " and "Future off-property cancer risks are primarily attributable to radon and its daughter products in air" These statements are unacceptable because they are vague and inconclusive. If we're leaving waste, we need to know when it will be most dangerous. We're leaving a radioactive legacy here. We need to warn future generations and we need to have the data to do so.
- Section 6.0 has two clauses (RAOs) that are impossible to meet if you leave waste below 16 ft. "Minimize water infiltration" and "Prevent direct contact" cannot happen if you leave stuff on site.
- For section 6.0, anticipated future land use is ridiculous. One cannot possibly anticipate 9,000 years of land use. Clean it up to the standards of the rest of OU-1. (no discriminating areas on site)
- "Final cleanup levels will be determined in the amended ROD"?? (6.0) this is sketchy! This allows the EPA too much wiggle room. We need specifics now while we can comment, not later when it's too late.
- Where is the BRA? (health assessment) 5.0 and 5.1
- 7.1 My comment on the on-site disposal cell (like Weldon Spring) is: \_\_\_\_\_
- "U.S. Ecology in Wayne, Michigan; Clean Harbors Deer Trail in Last Chance, Colorado; Energy Solutions in Clive, Utah; or U.S. Ecology in Grand View, Idaho" (7.1) Can we have an analysis of each place? Details about the transportation of the materials? An assurance we won't be harming the people who live near there like this waste has harmed us?
- 7.1- Do not move the waste from the lot and buffer zone over to areas 1 or 2 and leave it there. That is so counterproductive to pick it up and move it a few thousand feet. Get it out of this area, which we know is a terrible place to keep nuclear waste
- 7.1 mentions daily cover of wastes. How long will those covers be over the waste to ensure the reduction of spreading radiologically contaminated material?
- 67% radioactivity but only 83,900 tons of waste? That's only <30% of actual RIM on site.
- 7.3 Alt Four (chosen) "Where possible, any excavated overburden with RIM at concentrations below 52.9 pCi/g would be placed towards the bottom of the excavation to reduce the future risks at the Site" So even though you've already dug it up, just because it isn't radioactive ENOUGH for you, you're going to put it back in the ground???

- Why doesn't the cap include a barrier below the 16ft so that the wastes don't continue leaching into the groundwater?
- I vote for Alt. 7 (full removal with off site disposal/storage)
- Wholistically, it is unreasonable to expect citizens and state officials to read over 1000 pages of documents in order to make the decision. It makes it easier for the EPA and PRPs to hide things in the fine print (8.0)
- I feel that Option 4 does not address the criterion of reducing the mobility of the contaminants
- 8.3 cites that a liner would increase protection against groundwater contamination, so why isn't that part of the proposed plan?
- 8.3 "The degree of additional protectiveness associated with the removal of radioactivity is related to the concentrations removed and the depth of the removal. " Doesn't this kind of make your own point more faulty? If you know it is more protective to remove more waste and lower down, you should be. Scratching the surface is a temporary solution to a permanent problem. 16/89 ft contaminated is unacceptable.
- 8.3 "Flooding is not expected to impact the long-term performance of the alternatives because the Site is currently located more than 1.3 miles from the Missouri River and the OU-1 landfill is above the 500-year flood level, except for a narrow area along the eastern toes of Areas 1 and 2. " Didn't Maggie Wen, the student at WashU, disprove this with her paper?
- Flooding is important. A 500 year flood level is ridiculous since we're talking about 9000 years. The river's course has changed significantly just in the past 50 years due to climate change. How can you ensure that 1.3 miles away from a river is enough for 9000 years of change? You can't. This needs to be re-evaluated.
- 8.4 can we hear more about the soil segregation pilot study? I would like to know about how it will work and how effective it will be
- "For all of the alternatives, worker exposures will be closely monitored and engineering measures and best management practices will be taken to reduce exposures to within acceptable levels. However, risks to workers from exposure to gamma radiation can only be controlled by limiting exposure durations." (8.5) Can we have an outline of what that will look like for the St. Louisans who are hired to clean this up? We want to ensure their safety, so what specifically will we be doing for them?
- I am still not comfortable with a disposal cell near potentially burning (or has the potential to burn in the future) landfill cells (8.5)
- 8.6- While I understand that it is easier to implement things that do not require full excavation, it is only easier for now. The future (9,000 years of it) will demand higher standards. Don't procrastinate this issue or take the easy way out. We don't want future generations to have to deal with our generations' mess
- Are you filling the holes back up with new soil? Cause then we'd be contaminating more soil? And increasing the amount of radioactive material, seeing as how the 30% leftover will grow hotter with time and be even more dangerous than what you're removing now.

I support ALT. 7.

Get the citizens out. Buyouts.

Protect our tax base.

Dig deeper. Off-site.

Publish your data. And clean up  
your act, literally.

StL radwaste action team